



Tran-sjugular Liver Access Set

가

Rosch-Uchida

가

(Terumo, Tokyo, Japan)

headhunter catheter (Mall-inckrodt, St Louis, U.S.A.) 0.035-inch

(1).

40%

1cm

Rosch-Uchida Trans-jugular Liver Access Set(COOK, Bloomington, IN)

가

(2).

(brachial vein)

가

(Micropuncture needle, COOK, Bloomington, IN)

Rosch-Uchida Transjugular Liver Access Set

Trocar stylet

5F

가 Rosch-Uchida Transjugular Liver Access Set

(Fig. 2).

. 5F

Trocar stylet

0.035-inch

0.018-inch

68

20

10

(Terumo, Tokyo, Japan)

snare technique

14

1

6 mm 10 mm

(Ultrathin Diamond; Medi-Tech/Boston Scientific)

10mm, 2 cm

Wallstent (Schneider, Minneapolis, MN)

(Fig. 1).

(Fig. 3).

가

5F Cobra

catheter(Mallinckrodt, St Louis, U.S.A.) 0.035-inch



Fig. 1. Upper extremity venogram shows occlusion of the left subclavian vein(arrow) and multiple collateral pathways.



Fig. 2. Spot film shows placement of a Rosch-Uchida curved stainless-steel cannula and trocar stylet(arrow) in the left subclavian vein, directed toward a headhunter catheter in the innominate vein.



Fig. 3. After angioplasty and placement of a Wallstent, venogram shows patency of the venous shunt without extravasation.

(1). 40-50% 가

Beathard (3) 29% 54% 6

Beygui (4)

Vorwerk

25-40% (2, 5). Haage (6)

가 11-24% (7).

가 . Murphy (7) 가

Set Rosch-Uchida Transjugular Liver Access (scalenus anti-cus muscle)

(brachial plexus)

trocar stylet 가

Wire-loop technique

가

가 가 Murphy (7) (Covered Wallstent)

stent) Farrel (8) 5

Wallstent

가 (uncovered stent)

Rosch-Uchida Transjugular Liver Access Set

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## **Percutaneous Recanalization for Refractory Dialysis-related Subclavian Vein Obstruction : A Case with Needle Puncture<sup>1</sup>**

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Chronic central venous occlusion presents a difficult management problem, particularly when the occlusion cannot be traversed with a guide wire, a step which is essential for endovascular treatment such as balloon angioplasty and stent placement. We describe a less invasive technique in which the venous occlusion is traversed with a Rosch-Uchida Transjugular Liver Access Set. This procedure may be useful in cases where the involved extremity must be preserved for hemodialysis and where subclavian vein occlusion is refractory to traditional revascularization methods.

**Index words :** Dialysis  
Veins, stenosis or obstruction  
Veins, subclavian

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